

Abstract Submitted  
for the DPP96 Meeting of  
The American Physical Society

Sorting Category: 4.7 (theoretical)

**Testing Target Components Using a Near-Term Heavy Ion Driver**<sup>1</sup> D. A. CALLAHAN, M. TABAK, B. G. LOGAN, *Lawrence Livermore National Laboratory* — Many aspects of the traditional two radiator heavy ion target<sup>2</sup> can be tested using lasers such as Nova or the National Ignition Facility (NIF). Experiments using ion beams can compliment this work giving information on ion range shortening and hydrodynamic motion of the converter material. Hydrodynamic motion of the converter material has proven to be an important issue in the traditional two radiator heavy ion target. Ion range shortening is an important issue for the new distributed radiator target<sup>3</sup>. We will present 2-d Lasnex calculations which show that  $\sim 1$  kJ of beam energy can heat a small amount of material to temperatures relevant for heavy ion target physics ( $\approx 250$  eV).

<sup>1</sup>Work performed under auspices of the U.S. DoE by LLNL under contract W-7405-ENG-48.

<sup>2</sup>D. D.-M. Ho, this meeting

<sup>3</sup>M. Tabak, this meeting

☐ Prefer Oral Session  
☒ Prefer Poster Session

Debra Callahan  
debbie@hif.llnl.gov  
Lawrence Livermore National Laboratory

Special instructions: Next to poster by M. Tabak

Date submitted: July 3, 1996

Electronic form version 1.1